Report on the Geophysical Surveys Conducted on the Property of Norlex Mines Limited Whitefish Bay Area - Lake of The Woods Kenora Mining Division, Province of Ontario

SUMMARY

Twenty electromagnetic anomalies were outlined on the property of Norlex Mines Limited. Nine of these exhibit qualities which are interpreted to represent conductive material in the bedrock on the property. Six of the anomalies are located in a geological environment believed to be pyroclastics or sediments and situated stratigraphically in the transition zone from a basic to acid volcanic sequence.

CONCLUSION

Electromagnetic anomalies N1, N2, N4, N7, N11, N12, N14, N16 and N20 are diagnostic of those caused by sulphide mineralization in the bedrock of the property. All anomalies occur on the land portion of the property and depth of overburden over the anomalies is relatively light.

RECOMMENDATIONS

The following is recommended.

1. That the property be geologically mapped in detail, as an aid to evaluate the merits of the anomalies outlined.

2. That trenching and/or diamond drilling be performed to investigate those anomalies not accounted for in the geological mapping.

PROPERTY

This property of Norlex Mines Limited consists of twenty (20) contiguous, unsurveyed mining claims numbered K38186 to K38205 inclusive.

Area of the claim group is about 800 acres, of which 320 acres are water claims.

LOCATION, ACCESS, ETC.

The claim group is located twelve (12) miles south of the town of Kenora and covers part of East Peninsula, land under the waters of

Bottle Bay and the Lake of the Woods in the Kenora Mining Division, in the Province of Ontario.

Acces is most readily achieved by either boat or aircraft from the town of Kenora.

PROPERTY GEOLOGY

The property is underlain by a northwest - southeast trending sequence of basic and acid volcanic rocks. Dips are steep.

Structurally, the property is located along the axis of an anticline. The north limb of the anticline is composed of basic and acid volcanic rocks and the contact between these two lithological sequences strikes through the Norlex property. The south limb of the anticline consists essentially of basic volcanic rocks.

GEOPHYSICAL SURVEYS

Electromagnetic Survey - This survey was conducted using the McPhar 1000/5000 cycle equipment. This technique measures the inclination or dip of the resultant magnetic field in degrees. A majority of the vertical loop anomalies were checked by a single or several survey traverses using Ronka horizontal loop equipment.

Magnetic Survey - The magnetic survey was conducted using the Sharpe MF-1 fluxgate magnetometer.

Results of the magnetic and electromagnetic surveys are shown on the accompanying plans to the scale of one inch equals 200 feet.

Discussion of Geophysical Results

Electromagnetic Survey

Twenty electromagnetic anomalies were outlined in this survey and these are depicted on the accompanying plan as N1 to N20 inclusive. Corresponding horizontal loop anomalies are designated as H1 to H20 inclusive.

The anomalies outlined are tabulated on the following sheet as to length, width, strike and dip, magnetic correlation, conductivity and to possible cause of each.

Anomalies N1, N2, N4, N7, N11, N12, N14, N16 and N20 are worthy of investigation by trenching or diamond drilling, whichever is the

most feasible, in order to determine if economic sulphide mineralization is the cause of these.

Magnetic Survey

The main feature of this survey is the presence of two broad magnetic linears trending across the property. The most southerly magnetic zone occurs in basic volcanics and the higher magnetic susceptibilities occur near a basic-acid volcanic contact. A majority of the electromagnetic anomalies occur along the portion of the higher magnetic susceptibilities. It is interpreted that the magnetic expression of this zone denotes a lithological change from one consisting mainly of basic flows to pyroclastics or sedimentary, approaching the top of the basic volcanic sequence or the acid-basic volcanic contact.

The other magnetic zone occurs 900 feet north of the main magnetic feature and more or less parallel to it. It is 400 to 600 feet in width. This magnetic zone appears to occur entirely in an acid volcanic sequence and could in part represent basic intrusives or magnetite-bearing sedimentary formations.

Respectfully submitted

M.E.M. CONSULTANTS LIMITED

Michael Zurowski, B.Sc., P.Eng.

Toronto Ontario,
July 21, 1966
MZ/jc

NORLEX MINES LIMITED

ANOMALY EVALUATION

Vert Loop anomaly designation	Location claim No.	Length (ft.) minimum	Width	Strike & Dip	Magnetic Correlation	Hor. Loop Correlation	Conductivity	Interpretation (Possible Cause)	Remarks
N1	K38186 & 38187	1600	20-100	N80°W Vertical	Direct of 2000 to 6000 gammas	Yes	Good to Excellent	Sulphide Min.	Outcrop area anomaly can be trenched
N2	K38187 & 38204	800	70	East-West Vertical	Direct of 2000 to 10,000 gammas	Yes	Good to Excellent	Sulphide Min.	Outcrop area, anomaly can be trenched
N3	K38204	550	Narrow	East-West Vertical	No appreciable Magnetics	No	Poor	Shear Zone	
N4	K38204	800	10-30	East-West Vertical	Direct Magnetics over central part of zone of 5,000 gammas	Yes	Fair to Good	Sulphide Min.	
N5	K38205	400	Narrow	N70°E Steep	Fair Mag. response of 1000-2000 gammas	Not surveyed	Poor	Shear Zone?	
N6	K38205	200	Narrow	East-West Dip Unknown	Located on flank of Mag. Zone	Not surveyed	Poor	Cause indefinite	One Line Response
N7	K38205	350	30-50	N60°W Steep to N	Direct Magnetics of 2500 gammas	Yes	Good	Sulphide Min.	Depth to conductor shallow, readily trenched
N8	K38204 & 38205	600	Narrow	East-West Steep	Modest Magnetic Response	No	Poor	Overburden or shear zone	
N9	K38186	600	Narrow	East-West Steep	None	No	Poor to Fair	Overburden or shear zone	
N10	S. of Cl. K38186	200	Narrow	East-West Steep	None	Not surveyed	Poor	Shear Zone?	One Line Response
N11	K38190	1700	10-20	N75°West Steep to N	Direct Mag. Response of 1500 to 10,000 gammas	Yes	Fair to Good	Sulphide Min.	Depth of Overburden shallow
N12	K38191	400	30	East-West Steep	400 g. response over west end of Anomaly	Yes	Fair	Sulphide Min.	
N13	W. of cl. K38190	300	Narrow	East-West Steep	Magnetic Low	No	Poor	Shear Zone	
N14	K38189	600	Narrow	N80°W steep	No Appreciable Magnetics	Yes	Fair	Sulphide Min. Graph. Sed.	Depth of Overburden shallow
N15	K38193	600	Narrow	N80°W Steep	Moderate Response	No	Poor to Good	Shear Zone	
N16	K38193, 38198 and K38197	900	10-60	N50°W Steep S	None	Yes	Poor to Good	Sulphs in Shear Zone	EM located on North flank of Mag. Zone
N17	K38197	200	Narrow	N50°W Steep	None	No	Fair	Shear Zone	
N18	K38196	450	Narrow	N50°W steep	Broad Mag. Response of 300 gammas	Not surveyed	Fair	Shear Zone	
N19	K38192	200	Narrow	N70°W Steep	None	Not surveyed	Fair	Shear Zone	
N20	K3819[illegible]	400	[illegible]	N70°W [illegible]	Fair Mag. [illegible] Response of 400 gammas	Not surveyed	Fair	Sulphide Min.?	

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Mr. R. V. Scott,

Chief Mining Lands Division,

PARLIAMENT BUILDINGS,

TORONTO 2,

Ontario.

M.2338

Bigstone Bay (M.1815)

Wiley Bay (M.2337)

Aulneau Peninsula (M.2640)

AREA OF WHITEFISH BAY & MANROSS TWP. (LAKE OF THE WOODS)

DISTRICT OF KENORA

KENORA MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	(L)
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	MRO.
SURFACE RIGHTS ONLY	SRO.
ROADS	
IMPROVED ROADS	
KINGS HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C
TRAILS	

NOTES

400' Controlled Right Reservation Around All Lakes & Rivers

Reserve Flooding Rights Up To 1064' Above Mean Sea Level On All Lands Bordering On Lake Of The Woods File 1027 Vol 1

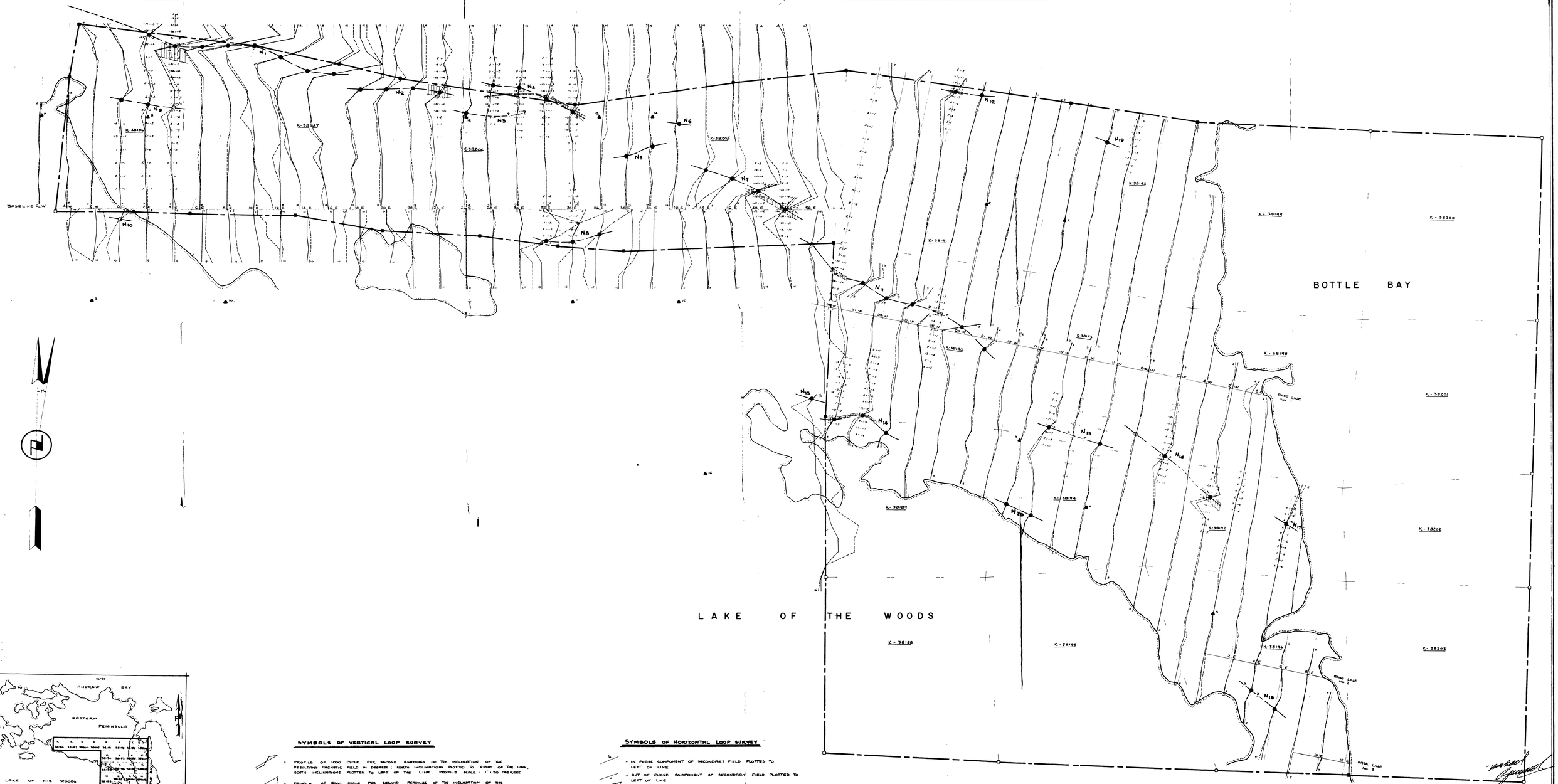
Pipestone Provincial Park Shown Thus Withdrawn From Staking

Islands In The Lake Of The Woods Thereto Do Not Form Part Of Manross Twp.

Boundary Of Manross Twp Shown Thus

PLAN NO.-M.2338

DEPARTMENT OF MINES
-ONTARIO-



MAP
½ MILE

SYMBOLS OF VERTICAL LOOP SURVEY

- Profile of 1000 cycle per second readings of the inclination of the resultant magnetic field in degrees; north inclinations plotted to right of the line, south inclinations plotted to left of the line. Profile scale: 1" = 10 degrees
- Profile of 5000 cycle per second readings of the inclination of the resultant magnetic field in degrees; north inclinations plotted to right of the line, south inclinations plotted to left of the line. Profile scale: 1" = 20 degrees
- N_T — Axis of coincident 5000 and 1000 cycle frequency response.
- Axis of 1000 cycle frequency response.
- Axis of 5000 cycle frequency response.
- ▲T. — Transmitter location.

SYMBOLS OF HORIZONTAL LOOP SURVEY

- In phase component of secondary field plotted to left of line
- Out of phase component of secondary field plotted to left of line
- Horizontal loop anomaly

NORLEX MINES LIMITED

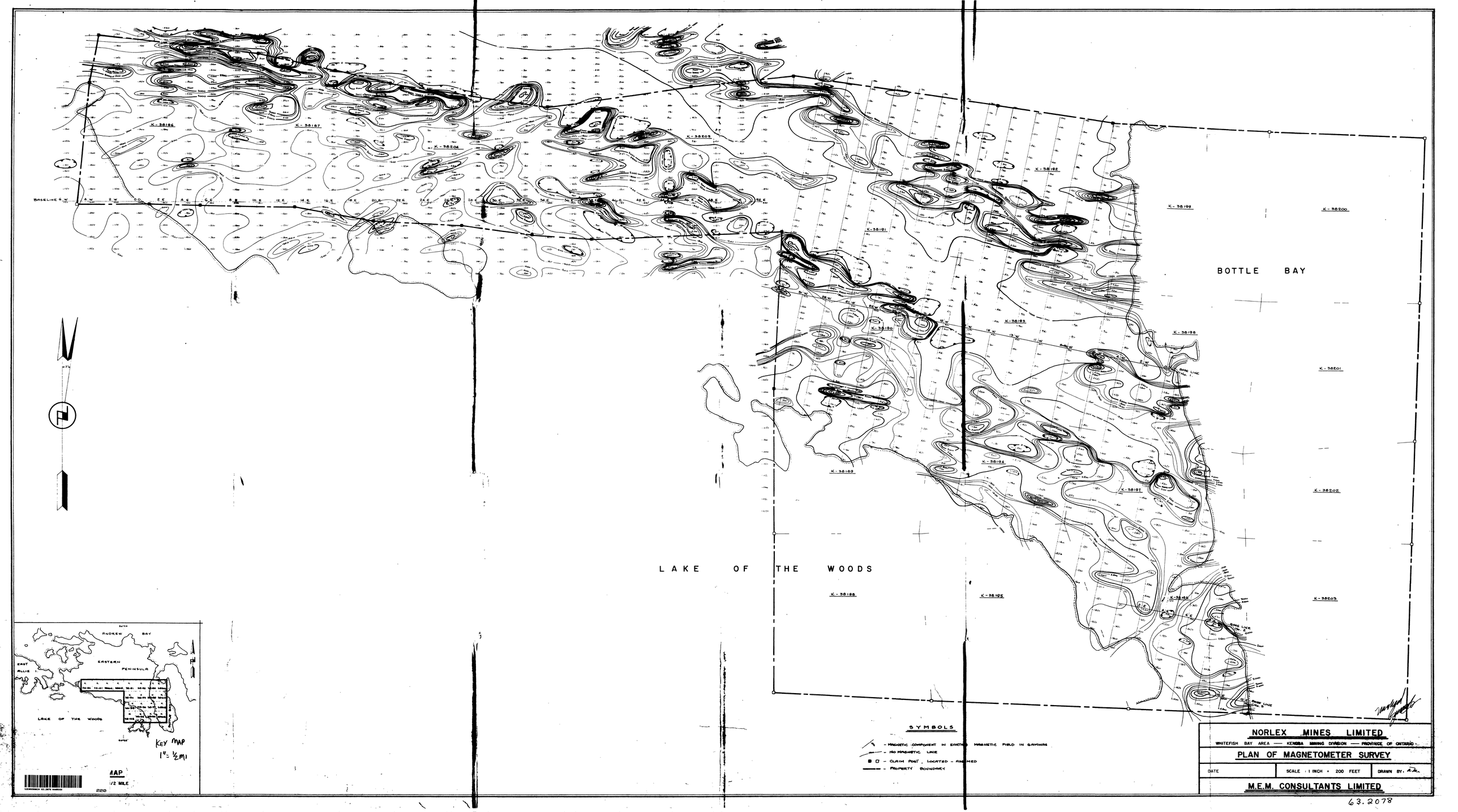
WHITEFISH BAY AREA — KENORA MINING DIVISION — PROVINCE OF ONTARIO

PLAN OF ELECTROMAGNETIC SURVEY

DATE:	SCALE: 1 INCH = 200 FEET	DRAWN BY: A.M. M.L.

M.E.M. CONSULTANTS LIMITED

63.2078


BASELINE G.W.
K-38186
K-38187
K-38204
K-38205
K-38102
K-38199
K-38200
K-38191
K-38190
K-38193
K-38198
K-38201
K-38194
K-38169
K-38197
K-38202
K-38188
K-38195
K-38203
BOTTLE BAY
LAKE OF THE WOODS
SYMBOLS
- MAGNETIC COMPONENT IN EARTH'S MAGNETIC FIELD IN GAMMAS
- NO MAGNETIC LINE
- CLAIM POST, LOCATED - REMED
- PROPERTY BOUNDARY
ANDREW BAY
EASTERN PENINSULA
EAST ALLIE
LAKE OF THE WOODS
BATTLE BAY
KEY MAP
1" = ½ MI
MAP
1/2 MILE
NORLEX MINES LIMITED
WHITEFISH BAY AREA — KENORA MINING DIVISION — PROVINCE OF ONTARIO
PLAN OF MAGNETOMETER SURVEY
DATE
SCALE : 1 INCH = 200 FEET
DRAWN BY:
M.E.M. CONSULTANTS LIMITED

63.2078